

AMENDMENTS

Amendments in the claims:

Claims 1-35. (canceled)

Claim 36. (currently amended): A process for producing clavulanic acid or a salt thereof, comprising:

- (a) fermenting a clavulanic acid-producing species of **Streptomyces** **Streptomyces** in a fermentation broth containing sources of assimilable carbon, nitrogen, and phosphorus, wherein the concentration of assimilable phosphorus in the fermentation broth is less than 0.15% w/v, **and wherein said fermentation comprises a growth phase and a stationary phase**; and,
- (b) growing the species at an assimilable phosphorus concentration of 0.0015% **w/v** to less than 0.15% **w/v during said growth phase, after which the concentration of said assimilable phosphorus is allowed to decrease**, and
- (c) isolating clavulanic acid, or a salt thereof, from the fermentation broth.

Claim 37. (canceled).

Claim 38. (currently amended): The process of Claim 36, wherein the concentration of said assimilable phosphorus is allowed to decrease **to a low value** after a fermentation time of 40 hours.

Claims 39-40. (canceled).

Claim 41. (currently amended): The process of Claim 36, wherein the concentration of said phosphorus upon fermentation is about 0.008% w/v.

Claim 42. (previously presented): The process of Claim 41, wherein no source of assimilable phosphorus is used after a fermentation time of 40 hours.

Claim 43. (previously presented): The process of Claim 36, wherein ammonia is not the sole said source of assimilable nitrogen.

Claim 44. (previously presented): The process of Claim 43, wherein said source of assimilable nitrogen does not include said ammonia.

Claim 45. (previously presented): The process of Claim 36, wherein said source of assimilable phosphorus is sodium phosphate, potassium phosphate, sodium dihydrogen phosphate, potassium dihydrogen phosphate, disodium hydrogen phosphate, dipotassium hydrogen phosphate, or a mixture thereof.

Claim 46. (previously presented): The process of Claim 45, wherein said source of assimilable phosphorus is sodium dihydrogen phosphate.

Claim 47. (currently amended): The process of Claim 36, wherein said species is ~~Streptomyces clavuligerus, Streptomyces jmonjinensis, Streptomyces katsurahamanus, or Streptomyces sp. P6621~~ Streptomyces clavuligerus, Streptomyces jmonjinensis, Streptomyces katsurahamanus, or Streptomyces sp. P6621.

Claim 48. (previously presented): The process of Claim 36, wherein said fermentation is a fed batch fermentation, with intermittent or continuous use of said source of assimilable phosphorus.

Claim 49. (previously presented): The process of Claim 36, wherein said source of assimilable carbon is selected from the group consisting of glycerol trioleate, glycerol, and corn starch, and said source of assimilable carbon is optionally used during said growth phase of said fermentation.

Claim 50. (currently amended): The process of Claim 49, wherein the concentration of said carbon is ~~between 1.5% and 7.5~~ **greater than 5% w/v**.

Claim 51. (previously presented): The process of Claim 36, wherein said source of assimilable nitrogen includes soy bean flour or ammonium sulfate, and said source of assimilable nitrogen is present in said fermentation broth upon fermentation and during said growth phase of said fermentation.

Claim 52. (currently amended): The process of Claim 51, wherein the concentration of said nitrogen is between 0.5% w/v and 15% w/v.

Claim 53. (previously presented): The process of Claim 36, wherein the volume of said fermentation broth is greater than 10^4 liters.

Claim 54. (currently amended): The process of Claim 53, wherein the volume of said fermentation broth is **not greater than 5×10^4** liters.

Claim 55. (currently amended): A fed batch fermentation process for producing clavulanic acid, or a salt thereof, comprising:

(a) fermenting a clavulanic acid-producing species of ***Streptomyces*** *Streptomyces* in a fermentation broth containing sources of assimilable carbon, nitrogen, and phosphorus, **wherein the concentration of assimilable phosphorus in the fermentation broth is less than 0.15% w/v, and wherein said fermentation comprises a growth phase and a stationary phase;** and,

(b) growing the species at an assimilable phosphorus concentration of 0.0015% w/v to less than 0.15% w/v during said growth phase, after which the concentration of said assimilable phosphorus is allowed to decrease, and

(c) isolating clavulanic acid, or a salt thereof, from the fermentation broth.

Claims 56-94. (canceled)

Claim 95. (new) The process of Claim 38, wherein said value is 0.00% w/v.